

U. S. Serial No. 10/079,010

Attorney Docket No. P04860US1

Amendments to the Claims

Claims 1-6 (Previously Cancelled).

Claim 7 (Currently Amended): A thin film chip resistor comprising:
a substrate;
a single metal thin film resistive layer directly attached to the substrate, the metal thin film layer being non-tantalum;
a chip resistor termination attached on each end of the metal thin film resistive layer; and
an outer moisture barrier consisting of tantalum pentoxide directly overlaying and ~~attaching to~~
contacting the metal thin film resistive layer for reducing failures due to electrolytic
corrosion under powered moisture conditions.

Claim 8 (Original): The thin film resistor of claim 7 wherein the metal film layer is an alloy containing nickel.

Claim 9 (Original): The thin film resistor of claim 7 wherein the metal film layer is an alloy containing chromium.

Claim 10 (Original): The thin film resistor of claim 7 wherein the metal film layer is a nickel-chromium alloy.

Claim 11 (Previously Cancelled).

U. S. Serial No. 10/079,010

Attorney Docket No. P04860US1

Claim 12 (Original): The thin film resistor of claim 7 wherein the tantalum pentoxide layer is overlaid by sputtering.

Claim 13 (Currently Amended): A nickel-chromium alloy thin film chip resistor comprising:
an alumina substrate;
a single nickel-chromium alloy thin film layer directly attached to contacting the substrate;
a chip resistor termination attached on each end of the nickel-chromium alloy thin film; and
an outer moisture barrier consisting of tantalum pentoxide directly overlaying and attaching to
contacting the nickel-chromium alloy thin film layer for reducing failures due to
electrolytic corrosion under powered moisture conditions;

Claim 14 (Currently Cancelled).]

Claim 15 (Currently Amended): A nickel-chromium alloy thin film chip resistor comprising:
an alumina substrate;
a single nickel-chromium alloy thin film layer directly attached to contacting the substrate;
a chip resistor termination attached on each end of the nickel-chromium alloy thin film;
a passivation layer directly overlaying and attaching to contacting the nickel-chromium alloy
layer; and
an outer moisture barrier consisting of tantalum pentoxide directly overlaying and attaching to
contacting the passivation layer for reducing failures due to electrolytic corrosion under
powered moisture conditions.

U. S. Serial No. 10/079,010

Attorney Docket No. P04860US1

Claim 16 (Currently Amended): A thin film resistor comprising:

a resistor substrate;

a single metal thin film resistive layer directly attached to contacting the substrate, the metal thin film layer being non-tantalum;

a chip resistor termination attached on each end of the metal thin film resistive layer;

a passivation layer directly overlaying and contacting the metal thin film resistive layer;

an outer moisture barrier consisting of tantalum pentoxide directly overlaying and contacting the passivation layer for reducing failures due to electrolytic corrosion under powered moisture conditions.